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PATENT (5298-05700/PM01016)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Collier et al.

Serial No. 09/899,871

Filed: July 6, 2004

For:

METHOD AND SYSTEM FOR

CLEANING A POLISHING PAD

Group Art Unit: 3723 Examiner: Wilson, L.

Atty. Dkt. No. 5298-05700

I hereby certify that this correspondence is being transmitted via facsimile or deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313, on the date indicated below:

May 17, 2004 Date

REPLY BRIEF TO EXAMINER'S ANSWER

Box AF Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

This paper is submitted in reply to the Examiner's Answer mailed March 17, 2004. The Appellant respectfully requests that the Board consider this Reply Brief, which is presented before the expiration date of May 17, 2004.

The Examiner's Answer withdraws the 102(e) rejection of claims 11, 12, 14, and 16-22 in view of U.S. Patent No. 6,284,092 to Manfredi. The Examiner's Answer, however, appears to contain new points of argument in regard to the 102(e) rejection of claims 11, 12, 14, and 16-22 in view of U.S. Patent No. 6,283,840 to Huey (hereinaster referred to as "Huey"). In particular, new points of argument were raised by the Examiner on pages 4-6 in the Examiner's Answer, beginning with Section 11 "Response to Argument." This Reply Brief addresses the new points of arguments as permitted under 37 CFR § 1.193(b).

With regard to the patentability of Group I, Claims 11, 12, 16, and 17, the Examiner disagrees with the Appellant's contention that mobility of the arm assembly taught by Huey fails to constitute a spray element with adjustable shields. In particular, page 4 of the Examiner's Answer states, "The claim language is broad and merely calls [for] adjustability of the shields; therefore, the broadest interpretation of the claim would allow for ... shields attached to a mobile arm to constitute adjustable shields." The Examiner uses the same argument to refute the Appellant's contention that there is no motivation within Huey to teach or suggest a spray element with one or more adjustable shields arranged about a plurality of nozzles. The Appellant disagrees with the Examiner's argument. In particular, the Appellant asserts that a spray element with adjustable shields cannot be broadly construed to include spray elements with fixed shields, which are only able to move or "be adjustable" as the Examiner refers to them by the adaptation of the spray element to move.

As noted in the Appeal Brief, the limitation of the claimed spray element to include adjustable shields specifically refers to the configuration of the spray element to include shields which are configured to move relative to the spray element and not the polishing system in which the spray element may be arranged. A specific reference is not needed to clarify to which the shields are adjustable, since the shields are components of the spray element and, therefore, are adjustable relative to the claimed spray element. A similar correlation may be shown by comparing a bike with a fixed set of handle bars and a bike with an adjustable set of handle bars. Although the bike with the fixed set of handle bars may be adapted to move, the fixed handle bars are not considered to be adjustable. In particular, the adaptation of the handle bars to be adjustable or fixed is relative to the components of the bike and not the environment in which the bike is positioned. It is, therefore, asserted that the mobility of the spray element provided within Huey does not constitute the limitation of the claimed spray element to have adjustable shields. Furthermore, without any teaching or suggestion within Huey to provide such a spray element, there is no motivation within Huey to teach the limitations of claim 11.

Although the Examiner's argument in regard to the patentability of Group I, Claims 11, 12, 16, and 17 in view of Huey is traversed, an amendment to claim 11 has been filed in conjunction with this Reply Brief in the interest to expedite resolution of the presently claimed case. In particular, claim 11 has been amended to clarify the adaptation of shields to be adjustable independent of an arm of the claimed spray element. Although it is asserted that such an amendment is not needed to overcome the § 102(e) rejections of claims 11, 12, 16, and 17 in view of Huey, it is believed that such an amendment addresses the concerns expressed in the Examiner's Answer mailed March 17, 2004.

For at least the reasons set forth above, Huey does not anticipate the claimed limitations of claim 11. As such, Appellant's reassert that the Examiner has failed to support a ground of anticipation by Huey, and respectfully requests that the Board of Patent Appeals overturn the Examiner's rejections of present Group I claims 11, 12, 16, and 17.

With regard to the patentability of Group II Claim 14, the Examiner disagrees with the Appellant's contention that Hucy does not disclose a spray element with a nozzle having a spray distribution which overlaps a spray distribution of an adjacent nozzle. In particular, page 5 of the Examiner's Answer states in reference to Huey that "... the nozzles are spaced apart but the spray patterns are close enough to have overlap of streams [e.g.,] notice the two set[s] of nozzles closest together." Such a statement, however, is traversed. Fig. 3 in Huey specifically illustrates spray streams 76 from nozzles 72 not overlapping. In addition, even if spray streams 76 are extrapolated down to polishing pad 54, spray streams 76 do not overlap. Although some of the nozzles illustrated in Huey are spaced closer together than others, there is no teaching or suggestion that the nozzles are spaced close enough that streams provided therefrom overlap. Consequently, Appellant's reassert that the Examiner has failed to support a ground of anticipation by Huey, and respectfully requests that the Board of Patent Appeals overturn the Examiner's rejections of present Group II claim 14. The Examiner cites U.S. Patent 5,578,529 to Mullins "... as another example of how streams can overlap." As noted in the Examiner's Answer, U.S. Patent 5,578,529 to Mullins has not been applied to the rejections of the presently claimed case and, therefore, adds no merit to argument supporting the rejections of the captioned appeal.

With regard to the patentability of Group III Claims 18-22, the Examiner disagrees with the Appellant's contention that pulsating a pressurized fluid is not necessarily a natural use of the presently claimed case. In addition, the Examiner disagrees with the Appellant's contention that pulsating a pressurized fluid upon a polishing pad is not a matter of operator choice. In particular, the Examiner cites IIuey as disclosing that fluids can be turned on and off, constituting the pulsating sequence recited in claim 18. On the contrary, the fact that the cleaning distribution system disclosed in Huey may be configured to be turned on and off does not constitute the pulsating sequence outlined in claim 18. As defined in Merriam-Webster's Dictionary, pulsating means to exhibit a pulse or pulsation: beat. Pulse is defined in Merriam-Webster's Dictionary as a transient variation of a quantity whose value is normally constant; or as a dose of a substance especially when applied over a short period time. There is no teaching or suggestion to vary the distribution of fluid through the system disclosed in Huey relative to quantity or time. Consequently, it is asserted that the Examiner's contention that Huey discloses a pulsating sequence is erroneous.

The Examiner's Answer further states that "Appellant has not specified pulsating or really define some sequence or special pattern to be considered" relative to the limitations of claim 18. On the contrary, page 26, lines 8-15 of the Specification clearly discusses a pulsating sequence which may be used for the method recited in claim 18:

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In some embodiments, the spray element may be activated in a pulsing sequence. In such an embodiment, the spray element may be programmed to be activated, terminated, and reactivated in a given amount of time. For example, the spray element may be activated for approximately 1 second to approximately 1 minute. The spray element may then be placed in standby mode for approximately 1 second to approximately 1 minute before being reactivated. In a preferred embodiment, the spray element may be programmed to pulse between activation mode of approximately 10 seconds and standby mode for approximately 5 seconds.

Although the pulsating sequence recited in claim 18 is not restricted to such a pulsating sequence, it is asserted that the Appellant has defined the term such that one skilled in the art would be aware of its meaning. In addition, it is asserted that "pulsating" has a well-known and ordinary meaning as referenced from Merriam-Webster's Dictionary above.

The Examiner's Answer further states in regard to arguing the Appellant's contention that pulsating a pressurized fluid upon a polishing pad is not a matter of operator choice, the "Appellant has not recited any special structure that is used to accomplish this pulsating. This structure can be used as a matter of choice by the operator to accomplish a pulsating fluid." The subject matter of claim 18 is a method for cleaning a polishing pad. No recitation of a structure for conducting the claimed pulsating sequence is needed unless to distinguish it from prior art. As noted above an in the Appeal Brief, Huey fails to disclose spraying a pressurized fluid in a pulsating sequence and, therefore, no reference to a structure used to generate a pulsating sequence is needed in order to distinguish the limitations of claim 18 from Iluey. Furthermore, the inclusion or exclusion of such a structure does not lend the pulsating limitation to be a matter of operator choice. As noted in the Appeal Brief, in order to deem a limitation of a method claim to be a matter of operator choice, some recognition of and/or motivation to use the method must be present in a cited reference.

The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device. Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984); MPEP 2144.04.

As noted above and in the Appeal Brief, Hucy does not teach, suggest or provide motivation to spray a pressurized fluid in a pulsating sequence. Consequently, the Examiner's argument that the limitations of claim 18 is a matter of operator choice is reasserted to be erroneous.

For at least the reasons set forth above, Huey does not anticipate the claimed limitations of claim 18. As such, Appellant's reassert that the Examiner has failed to support a ground of anticipation by Huey, and respectfully requests that the Board of Patent Appeals overturn the Examiner's rejections of present Group III claims 18-22.

CONCLUSION

For all of the above reasons, and for reasons clearly stated in Appellant's Appeal Brief, it is believed that the claims are patentably distinct over the art of record. Appellants respectfully request that the Board of Patent Appeals overturn the Examiner's rejections.

Respectfully submitted,

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